

Work Order ID: 56867

March 11, 2010 10:48:44 AM



Page 1

Item ID: D130-700-011

Accept



Setup Start



Revision ID:

Item Name: Bearpaw

Stop



Start Date: 11/03/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 18/03/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

PL

Date: 10-3-11

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3167

Rev A1

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D130-700-011CHG001

8/10/09/31

10/03/29

120

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

Cut Blank as per File D3167-1_BLANK

10-3-16

(8)

130

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Note: (2) Bearpaw for (1) Kit □1-Inspect material for defects or damage prior to machining □2-Machine as per Folio FA285 and Dwg D3167 □3-Deburr

8/10/03/23
10/03/24

8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 56867

March 11, 2010 10:48:44 AM



Page 2

Item ID: D130-700-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Bearpaw

Start Date: 11/03/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 18/03/2010 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

8.9 10/03/23 /mf 00/03/24

Quality Control

8 0

150

QC8- Inspect parts - second check

0.00



QC

Memo

Quality Control

Y.A 10/03/29

8 0

160

Pick Kit

0.00



Packaging

Memo

Packaging

12/13/29 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

Work Order ID 56867

March 11, 2010 10:48:44 AM



Page 3

Item ID: D130-700-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Bearpaw

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Cust Item ID:

Required Date: 18/03/2010 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

170

QC4- 100% Inspect kits for completeness

0.00

S 10/13/11



QC

Memo

0.00

Quality Control

(+4)

180

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D130-700-011 □ Location: _____

NVA

10/13/11 (4)

190

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/04/06
10-4-5
(4)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Picklist Print

March 11, 2010 10:48:48 AM

Page 1

Work Order ID: 56867

Parent Item: D130-700-011

Parent Item Name: Bearpaw


Comments: IPP RevA: New issue DD verified by:EC

Start Date: 11/03/2010

Required Date: 18/03/2010

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MOHMBW10  UHMW 1" Black		Purchased	No			120	sf	418.2888	28.7158			

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

MAT

386.5411

112186

122.0164

113166

21.6264

113903

242.8983

Main Warehouse

ST

31.7477

111354

31.7477

AN4-12A

Purchased

No

170

Each

327.0000

16.0000

Bolt

Warehouse

Location

Loc Qty

Loc Code

Main Warehouse

ST357

327

105143

1

111605

13

111925

5

112314

300

6071

8

1810-3-15

8

113903

11/13/29 (4)

11/12314

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 2

Work Order ID: 56867

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Parent Item Name: Bearpaw

Comments: IPP RevA: New issue DD verified by:EC

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Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN4-15A <i>8 44</i>	<i>84</i>	Purchased	No			170	Each	263.0000	32.0000			
												
Bolt												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST358

263

113121

6

113538


1


113840

120

114108

136

AN960JD416 <i>124</i>		Purchased	No			170	Each	0.0000	48.0000			
												
Washer												

D2182B <i>44 @ 6.0011</i>		Manufactured	No			170	f	152.4470	8.0000			
												
Rubber Cushion <i>L2 measured 8/10/3/30</i>												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

29.886

28042

7.33

30872

0.33

45405

22.226

Main Warehouse

ST410

122.5610211

52649

122.561021

March 11, 2010 10:48:48 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

March 11, 2010 10:48:48 AM

Page 3

Work Order ID: 56867



Parent Item: D130-700-011



Parent Item Name: Bearpaw

Start Date: 11/03/2010

Required Date: 18/03/2010

Comments: IPP RevA: New issue DD verified by:EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2274		Manufactured	No			170	Each	240.0000	48.0000			
-------	--	--------------	----	--	--	-----	------	----------	---------	--	--	--



Radius Block



B47796 84

Warehouse	Loc Qty	Loc Code
-----------	---------	----------

Location

Main Warehouse

ST

190

55602

190

55602 90X

Main Warehouse

ST010

50

52644

29

54850

10

55443

11

D2519		Manufactured	No			170	Each	10.0000	16.0000			
-------	--	--------------	----	--	--	-----	------	---------	---------	--	--	--



Clamp



B42407 44 6/14/29
B373852 14
356763 110

Warehouse	Loc Qty	Loc Code
-----------	---------	----------

Location

Main Warehouse

ST

10

43842

10

March 11, 2010 10:48:48 AM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

March 11, 2010 10:48:48 AM

Page 4

Work Order ID: 56867



Parent Item: D130-700-011



Parent Item Name: Bearpaw

Start Date: 11/03/2010

Required Date: 18/03/2010

Comments: IPP RevA: New issue DD verified by:EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2529		Manufactured	No			170	Each	290.0000	48.0000			
-------	--	--------------	----	--	--	-----	------	----------	---------	--	--	--



Washer



B45338 8x

143/23

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST017

290

56184

290

D3171-1



Angle

Manufactured No

170

Each

6.0000

16.0000



56184 4x

B37199 143/31

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST041

6

51410

6

March 11, 2010 10:48:48 AM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID: 56867



Parent Item: D130-700-011



Parent Item Name: Bearpaw

Start Date: 11/03/2010

Required Date: 18/03/2010

Comments: IPP RevA: New issue DD verified by:EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

MS21042L4

128

Purchased

No

170

Each

2,358.000

48.0000



-

12/14/3/29/9

64Nut

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST300

2358

102552

6

104248

6

110507

184

111827

186

113422

976

114108

1000

11/1827

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 56367
Description: Bearpaw		Part Number: D3167-1
Inspection Dwg: D3167	Rev: A1	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Inspection Sheet Drawing Dimension		Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.06 x 45°	+0.030/-0.010	0.060	✓			
B	5.80	+/-0.030	5.800	✓			
C	0.25 x 45°	+/-0.030	.25 x 45°	✓			
D	R0.25	+/-0.030	R0.25	✓			
E	0.200	+/-0.030	.200	✓			
F	0.250	+/-0.010	.245	✓			
G	0.625	+/-0.030	.615	✓			
H	0.375	+/-0.010	.372	✓			
I	0.950	+0.030/-0.010	.956	✓			
J	3.21	+/-0.030	3.200	✓			
K	19.00	+/-0.030	19.00	✓			
L	Ø0.260	+0.005/-0.000	.260	✓			
M	Ø0.93	+/-0.030	.927	✓			
N	0.30	+0.030/-0.000	.316	✓			
O	0.375	+/-0.030	.373	✓			
P	7.23	+/-0.030	7.230	✓			
Q	4.54	+/-0.010	4.545	✓			
R	2.00	+/-0.030	2.015	✓			
S	12.000	+/-0.010	12.000	✓			
T	6.000	+/-0.010	6.000	✓			
U	23.75	+/-0.030	23.75	✓			

Measured by: L.S.	Audited by: H.A.	Prototype Approval:	N/A
Date: 10/03/22	Date: 10/03/29	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O D130-700-011	KJ/RF	#

DART



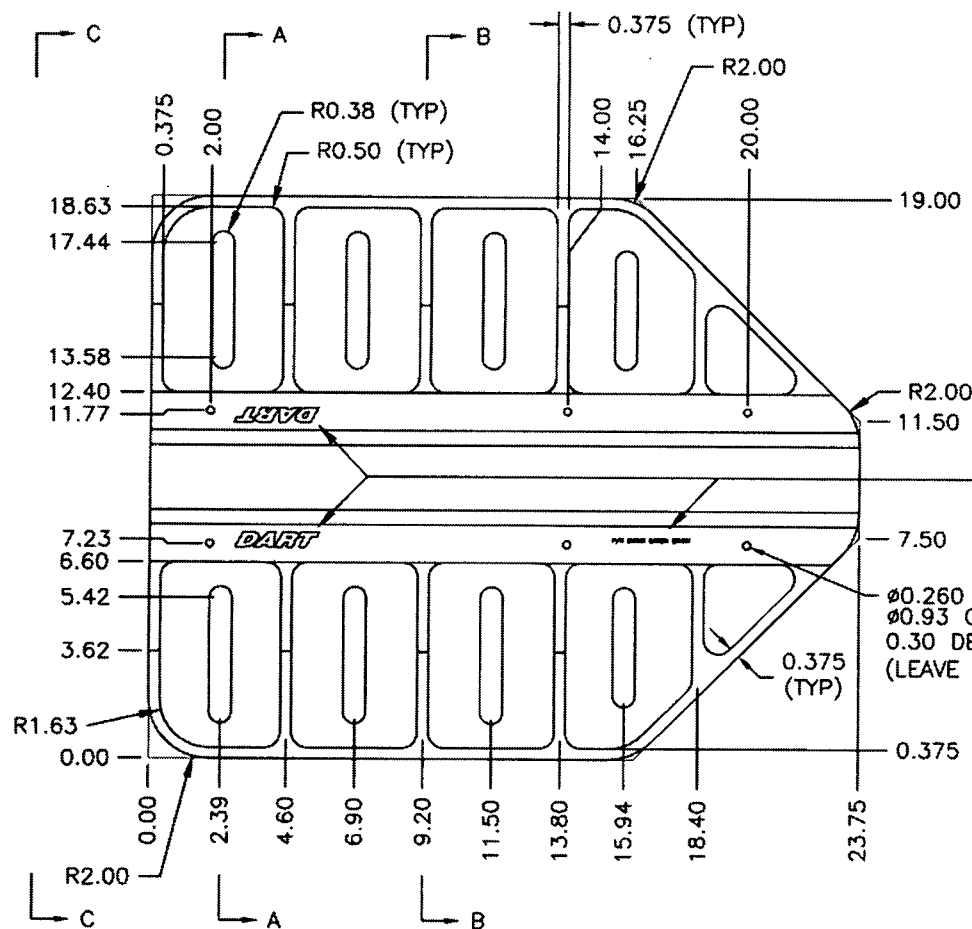
RELEASED
02.10.25

ENGRAVE LOGO TO MAX
DEPTH OF 0.012. ENGRAVE
PART AND BATCH NUMBERS
TO MAX DEPTH OF 0.010.
(TYPICAL LOCATION AS
ILLUSTRATED)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 56867

12-10-3-11

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. A
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO.	D3167	SHEET 1 OF 2
DATE	02.10.08	TITLE	BEARPAW	SCALE
A	02.10.08	NEW ISSUE		1:6
A1	02.12.17	5.80 WAS 5.50		



D3167-1

MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

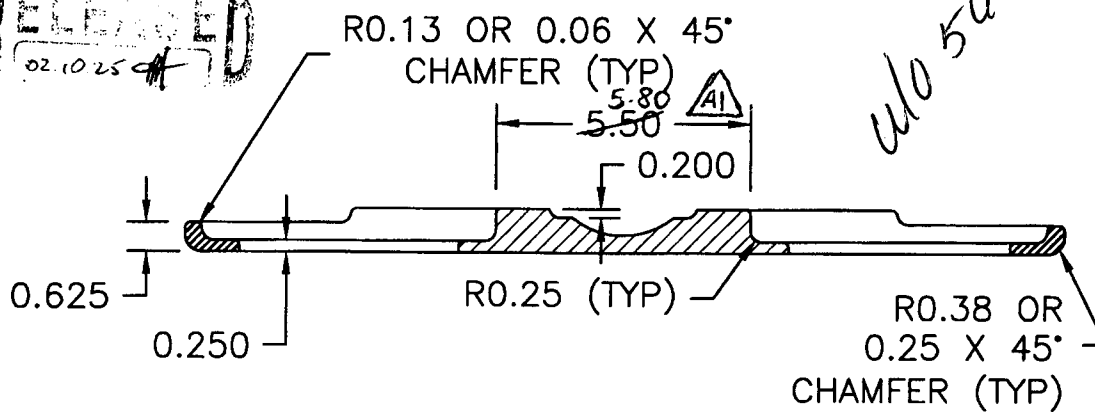
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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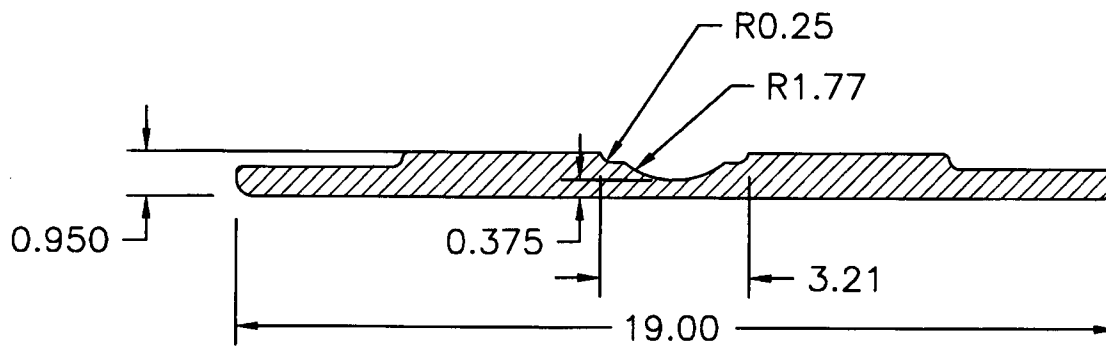


DESIGN 	DRAWN BY 	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. D3167	REV. A SHEET 2 OF 2
DATE 02.10.08		TITLE BEARPAW	SCALE 1:4

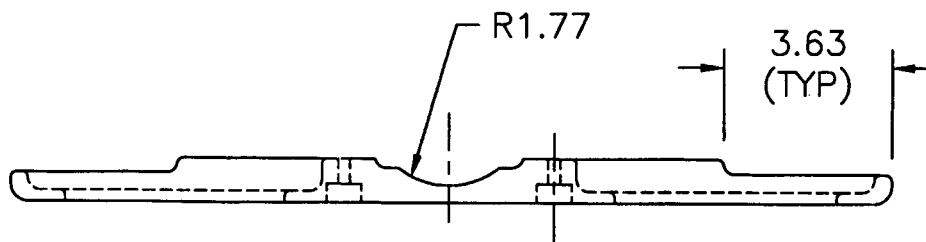
RELEASED
02.10.25



SECTION A-A



SECTION B-B



SECTION C-C

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NOTE: Date & initial all entries

REFERENCE ONLY**32.3 WEIGHT AND BALANCE**

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D130-700-011 Bearpaw Installation	12.5 lb 5.67 kg	0.0 in 0.0 m	0.0 lb-kg 0.0 m-kg	159.8 in 4.05 m	1998 in-lb 23.0 m-kg

32.4 PARTS LIST

Qty	Part Number	Description
X	D130-700-011	BEARPAW INSTALLATION
4	D2182B060	Rubber Cushion
12	D2274	Radius Block
12	D2529	Washer
4	D2519	Clamp
2	D3167-1	Bearpaw
4	D3171-1	Angle
4	AN4-12A	Bolt
8	AN4-15A	Bolt
12	AN960JD416	Washer
12	MS21042L4	Nut (or MS21042-4)

TC Accepted
DEC 18 2002

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